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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,930	11/19/2003	John D. Anderson	5198F	6422

7590 07/02/2004

William S. Parks
P.O. Box 1927
Spartanburg, SC 29304

EXAMINER	
DENTZ, BERNARD I	

ART UNIT	PAPER NUMBER
1625	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/716,930	ANDERSON ET AL.	
	Examiner	Art Unit	
	Bernard Dentz	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2-19-2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 which includes mono benzylidene alditol acetals is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al, US Patent 6.187,842 in view of Titus et al, US Patent 4,808,650, both cited by applicants. The former discloses a genus of compounds, with the same utility as a gelling agent, which differ from applicants' genus in reciting halogen rather than fluorine as value of one of the substituents. See col. 2, lines 36-65 formula (1) where p=1, R1 and R 2 are different and 2 is halogen.

The particular substitution is determined by the substituted benzaldehyde used to react with sorbitol. See col. 3, line 66 to col. 4, lines 26 and 37. It produces mono-(3-chloro-4-methylbenzylidene)-D-sorbitol. See col. 3, lines 42-44. Thus the mono-(3,halo-4-loweralkylbenzylidene)-D-sorbitol compounds are strongly taught.

One of ordinary skill in the art would have been motivated in view of Titus et al to make the fluoro analog of this compound and thus the instant compounds would have been obvious to one of ordinary skill in the gelling art because Titus in this art teaches that di-(3- and 4-fluoro- and 2- and 4-chloro-benzylidene)-D- sorbitols are both known to be effective gelling agents. Thus this provides the motivation for the selection of fluorine as the halogen in Kobayashi et al.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Videau et al, US Patent 5,696,186 cited by applicants in view of Kobayashi et al, supra. The former teaches as nucleation/clarification agents for synthetic polymers alditol acetals of dibenzylidene-sorbitol type. Such derivatives result in particular from the dehydrocondensation of an alditol (e.g. sorbitol) with 2 molecules of a benzaldehyde at least 1 of which is substituted, in at least 1 position, with any group or molecule, preferably an alkyl group (methyl, ethyl or the like) or halogen (fluorine, chlorine or the like).

The latter discloses a specific mixed halo, alkyl substituted- benzylidene acetal of sorbitol as expounded above for the same utility. Thus one would have been motivated to select F,alkyl-benzylidene acetals of sorbitol from the genus taught by same. Thus the invention recited in the instant claim is obvious over the art.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mahaffey et al, US Patent 4,371,645 cited by applicants. In the art of substituted di-(Benzylidene) acetals of alditols, like sorbitol, the former teaches that at least one of the benzylidene groups is substituted at either or both of the meta and para positions with a halogen atom selected from bromo and chloro. Substituents which may be employed at on the substituted benzaldehyde moiety in any of the ortho, meta and para posititions include in addition to chloro and bromo, which must be provided in either or both of the meta or para positions on at least 1 of the benzaldehydes, lower alkyl, hydroxy, methoxy, mono- and di-alkylamino, amino and halogen other than chlorine and bromine. Since F is one of the 2 other common halogens, the instant genus of benzylidene alditol acetals

comprising at least 1 substituted benzylidene component wherein at least 1 substituted benzylidene component possesses at least 1 F pendant group and at least 1 other pendant group is overlapped and rendered obvious by Mahaffey et al.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Titus et al, supra in view of Mahaffey et al supra. The former specifically discloses the effectiveness of fluoro as the halo substituent at the meta and/or para positions of di(benzylidene) acetals of sorbitol in place of bromo and chloro in Mahaffey et al's substituted compounds. In view of the latters teaching of the use of another substituent such as alkyl, methoxy or another halogen on said benzylidene moieties one of ordinary skill would have been motivated to add such to the compounds taught by Titus et al, and therefore the instant substituted compounds would therefore have been obvious to one of ordinary skill in the art.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of

copending Application No. 10/716915. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claim is generic to those of the latter application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/243247. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claim is generic to said claim of the latter application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Dentz whose telephone number is 571-272-0683. The examiner can normally be reached on Mon-Fri from 8:15 to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane, can be reached on 571 272-0683. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. Dentz

6-23-2004